

Application for Class I Operating Permit to Construct
White Pine Energy Station
White Pine County, Nevada

Prepared For:

White Pine Energy Associates, LLC
Two Tower Center, 11th Floor
East Brunswick, New Jersey 08816

Prepared By:

LS Power Development, LLC
400 Chesterfield Center, Suite 110
St. Louis, Missouri 63017

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GENERAL COMPANY INFORMATION

All applicants shall complete each item or explain in the space provided why no information is needed. Please specify "N/A" (Not Applicable) if necessary. The application will be returned to the applicant if it is deemed incomplete.

1. COMPANY NAME AND ADDRESS THAT ARE TO APPEAR ON THE OPERATING PERMIT [NAC 445B.295.1]:

White Pine Energy Associates, LLC
(Name)

C/o LS Power Development, Two Tower Center, 11th Floor
(Address)

East Brunswick NJ 08816
(City) (State) (Zip Code)

2. Owner's Name and Address [NAC 445B.295.1]:

White Pine Energy Associates, LLC
(Name)

C/o LS Power Development, Two Tower Center, 11th Floor
(Address)

East Brunswick NJ 08816
(City) (State) (Zip Code)

3. Source Name and Mailing Address, if different from #1 [NAC 445B.295.1]:

White Pine Energy Station
(Name)

C/o LS Power Development, Two Tower Center, 11th Floor
(Address)

East Brunswick NJ 08816
(City) (State) (Zip Code)

4. Physical Location of Stationary Source [NAC 445B.295.8]: (if no physical address, describe location, e.g., 4 miles south of I-80 at xx Interchange)

The PC boiler stacks are proposed to be located approximately 5 miles south of county road WP18 and approximately 1 mile west of US Hwy 93. To access the Facility, an existing dirt road will be improved from US Hwy 93 (near mile marker 86.9) west to the project site.

GENERAL COMPANY INFORMATION (CONTINUED)

Township(s)	22 North	Range(s)	64 East	Section(s)	E ½ Section 31 W ½ Section 32 W ½ E ½ Section 32
Township(s)	21 North	Range(s)	64 East	Section(s)	NE ¼ Section 6 N ½ SE ¼ Section 6 NW ¼ Section 5 NW ¼ NE ¼ Section 5 NW ¼ SW ¼ Section 5

5. Plant Manager or Other Appropriate Contact [NAC 445B.295.1]:

<u>Kathy French</u> (Name)	<u>Environmental Manager</u> (Title)	
<u>C/o LS Power Development, 400 Chesterfield Center, Suite 110</u> (Address)		
<u>St. Louis</u> (City)	<u>MO</u> (State)	<u>63017</u> (Zip Code)
<u>636-532-2200</u> (Telephone #)	<u>636-532-2250</u> (FAX #)	<u>kfrench@lspower.com</u> (E-mail address)

6. Responsible Official Name, Title and Address [NAC 445B.295.1]:

<u>Michael P. Witzing</u> (Name)	<u>Executive Vice President</u> (Title)	
<u>C/o LS Power Development, Two Tower Center, 11th Floor</u> (Address)		
<u>East Brunswick</u> (City)	<u>NJ</u> (State)	<u>08816</u> (Zip Code)
<u>732-249-6750</u> (Telephone #)	<u>732-249-7290</u> (FAX #)	<u>mwitzing@lspower.com</u> (E-mail address)

7. If records required under the operating permit will be kept at a location other than the source, specify that location [NAC 445B.295.7].

<u>N/A</u> (Name)		
<u></u> (Address)		
<u></u> (City)	<u></u> (State)	<u></u> (Zip Code)

GENERAL COMPANY INFORMATION (CONTINUED)

8. This application is submitted for (please check appropriate boxes below):

☒ **A new Class I Operating Permit to Construct**

- ☒ This application is for a source subject to PSD requirements (40 CFR § 52.21).
- ☒ This application is for a source subject to the following NSPS requirements (40 CFR § 60):
Da, Db, HHHH, IIII, Y

- ☒ This application is for a source subject to the following NESHAP requirements (40 CFR § 63):
ZZZZ, DDDDD

☐ **A modification of an existing Class I Operating Permit to Construct**

- ☐ This application is for a source subject to PSD requirements (40 CFR § 52.21).
- ☐ This application is for a source subject to the following NSPS requirements (40 CFR § 60):

- ☐ This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

☐ **The revision of an existing Class I Operating Permit to Construct**

- ☐ This application is for a source subject to PSD requirements (40 CFR § 52.21).
- ☐ This application is for a source subject to the following NSPS requirements (40 CFR § 60):

- ☐ This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

9. The application must contain, if applicable:

- a. For a proposed new major source, or a proposed significant modification to an existing stationary source which is not subject to the provisions of 40 CFR §52.21, include all information as required by NAC 445B.308 to 445B.313, inclusive [NAC 445B.3363.2(b)].
- b. For stationary sources subject to the provisions regarding new source review set forth in 42 USC §§7501 - 7515, inclusive (nonattainment areas), all information required by 42 USC §7503 [NAC 445B.3363.2(b)(3)].
- c. For a proposed new major source or a proposed significant modification to an existing stationary source that is subject to the provisions of 40 CFR §52.21, include all information required by 40 CFR §52.21 [NAC 445B.3363.2(a)].

10. Will the construction occur in more than one phase? ☐ Yes ☒ No

11. If the construction will occur in more than one phase, please provide the projected date of the commencement for each phase of construction:

Phase 1: _____
Phase 2: _____

GENERAL COMPANY INFORMATION (CONTINUED)

12. For a modification of a stationary source, provide a Compliance Assurance Monitoring (CAM) plan for all emission units subject to the monitoring requirements of 40 CFR Part 64. For significant revisions provide a CAM plan for those emission units for which a significant revision to the operating permit is requested and which is required pursuant to the monitoring requirements of 40 CFR Part 64. If a CAM plan is not required, provide an explanation. [NAC 445B.295.8]
13. **Application Submittal:**
Please remove the cover page, Table of Contents and General Information page and all Attachments of the application packet. Submit the remainder of the application packet as your formal application. This should consist of, at a minimum, the Class I Application cover page, the general Company Information, and Appendices 1 through 9.

Introduction

White Pine Energy Associates, LLC (WPEA or the Applicant) is a limited liability company formed to develop, construct, own, and operate a proposed pulverized coal-fired electric power generation facility near the town of McGill in White Pine County, Nevada (White Pine Energy Station or the Facility). WPEA is wholly owned by LS Power Associates, L.P., which is managed by LS Power Development, LLC, an experienced power project developer headquartered in East Brunswick, New Jersey. LS Power Development, LLC has prepared this application for a Class I Operating Permit to Construct on behalf of WPEA. Any questions, comments, or correspondence related to this permit application can be directed to:

Mr. David Wilson
Environmental Engineer
LS Power Development, LLC
400 Chesterfield Center, Suite 110
St. Louis, MO 63017
Tel: (636) 532-2200
Fax: (636) 532-2250
Email: dwilson@lspower.com

This permit application contains the necessary information for the Nevada Division of Environmental Protection (NDEP) to review the proposed project in accordance with the Prevention of Significant Deterioration (PSD) permitting requirements in the Code of Federal Regulations, 40 CFR 52.21, and the Nevada Administrative Code.

Project Location

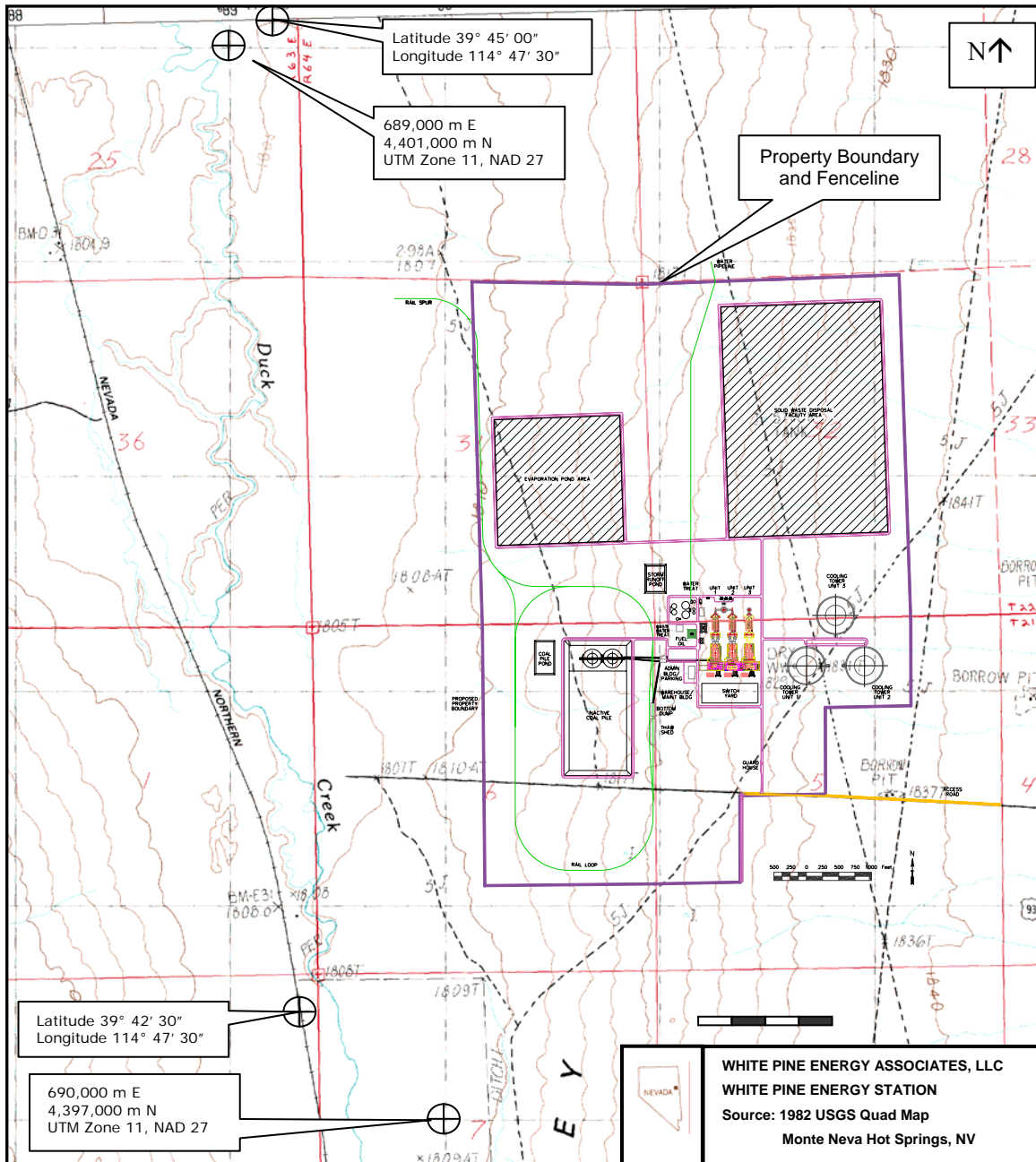
The White Pine Energy Station will be located on a project site comprised of approximately 1,280 acres of Bureau of Land Management (BLM) land located in White Pine County, approximately thirty miles north of Ely, Nevada. Specifically, the proposed project site is located in the following.

Township(s)	22 North	Range(s)	64 East	Section(s)	E ½ Section 31 W ½ Section 32 W ½ E ½ Section 32
Township(s)	21 North	Range(s)	64 East	Section(s)	NE ¼ Section 6 N ½ SE ¼ Section 6 NW ¼ Section 5 NW ¼ NE ¼ Section 5 NW ¼ SW ¼ Section 5

A copy of the U.S. Geological Survey (USGS) topographical map showing the site location and surrounding region is shown in Figure 1.1. The Universal Transverse Mercator (UTM) coordinates, as well as the latitude and longitude, for the site are given below.

Easting: 690,064 meters
Northing: 4,398,335 meters
UTM Zone: 11, NAD 83
Latitude: 39 deg, 42 min, 49 sec
Longitude: 114 deg, 46 min, 58 sec

Figure 1.1 - Site Location



Project Overview

The White Pine Energy Station will be a nominal 1,590 MW coal-fired electric generating station which will fall into the Standard Industrial Classification (SIC) code of 4911. The Facility is expected to operate between 25% and 100% of maximum load. The Facility will consist of three units, each one comprised of one supercritical pulverized coal (PC) fired boiler and a multiple shell condensing steam turbine generator. Heat rejection will be accomplished by a Heller dry cooling system which will use multiple direct contact condensers and water-to-air heat exchangers housed in two natural draft cooling

towers. In addition, the Facility will have an auxiliary boiler and various auxiliary equipment and facilities. The Facility will be designed to burn Powder River Basin (PRB) coal with the flexibility of blending in alternate low sulfur Colorado or Utah bituminous coals. Ultra low sulfur (15 ppm sulfur by weight) distillate fuel will be used as the start-up fuel for the PC units and for operation of the auxiliary boiler.

Construction of the White Pine Energy Station is expected to commence in 2006 and be complete in 2012. Commercial operations are targeted to commence in 2010 for the first unit, spring of 2012 for the second unit, and the fall of 2012 for the third unit. Construction will be continuous, but due to the complexity and approximate six year construction time frame, completion of construction activities will be staggered for the two units.

Air Emissions

The proposed Facility will include several point sources and fugitive sources of emissions of regulated pollutants. The significant sources are listed below. Each of these sources are included in the air quality analysis modeling discussed later in this application.

- PC boilers
- Distillate fuel-fired auxiliary boiler
- Coal unloading and handling facilities
- Active and inactive coal storage piles
- Fly ash handling and storage facilities
- Lime unloading, handling and storage facilities
- Paved and unpaved roadways
- Emergency diesel engine driven emergency generator and firewater pump

The Facility plot plan, area map and flow diagrams of material handling systems with emission sources identified, are contained in Appendix 7. The designations shown in the drawings for the emission sources are used in all application forms and modeling runs.

The following emission sources in the Facility will be insignificant, or operate infrequently, and were not included in the air quality analysis modeling:

- One nominal 330,000 gallon distillate fuel storage tank for the PC boilers and auxiliary boiler.
- Diesel fuel storage tanks for the diesel engine driven firewater pump and diesel engine driven generator.
- Unleaded gasoline and diesel fuel storage tanks for station vehicles with associated fuel dispensing stations.

A best available control technology (BACT) analysis was conducted to identify the control technology to be utilized for each regulated pollutant. The analysis is included in Appendix 10 of this permit application. The proposed control technologies for the PC boilers are summarized below in Table 1.1.

Table 1.1 – Proposed Control Technologies for PC Boilers

Control Technology	Pollutants Controlled
Good combustion practices	CO and VOC
Low NO _x burners, overfire air and selective catalytic reduction (SCR)	NO _x
Spray dryer absorber (dry scrubber)	SO ₂ , HF, H ₂ SO ₄ , and Hg
Fabric filter baghouse	PM, PM ₁₀ , H ₂ SO ₄ , Pb and Hg
Halogenated Activated Carbon Injection	Hg

For the auxiliary boiler, low sulfur distillate fuel will be used to minimize emissions of SO₂ and H₂SO₄. The use of low NO_x burners and flue gas recirculation (FGR) will minimize NO_x emissions, and good combustion practices will minimize the emissions of CO and VOC.

For the material handling sources, a combination of enclosures, fabric filters, and water or chemical sprays will be used to control fugitive dust. Best management practices will be used throughout the Facility to minimize fugitive emissions.

Additional Environmental Considerations

Besides the environmental impacts to air quality considered by this permit application, WPEA must also obtain permits from NDEP (via separate permitting processes) for an evaporation pond and solid waste disposal facility. WPEA is also working with the Bureau of Land Management (BLM) on the preparation of an Environmental Impact Statement.